

MEMORANDUM

To: Illinois Solar Coalition
From: Interstate Renewable Energy Council, Inc.¹
Date: May 2, 2012
Re: Distributed Generation Certification Requirements

On October 26, 2011, the Illinois General Assembly passed Public Act 97-0616, which added § 16-128A to the Illinois Public Utilities Act. Section 16-218A states in part that within 18 months—or by April 26, 2013—the Illinois Commerce Commission (Commission) must adopt rules “establishing certification requirements ensuring that entities installing distributed generation facilities are in compliance with the requirements of subsection (a) of Section 16-128 of this Act.”² Section 16-128(a) addresses the training and competency of employees that perform work on the electric system on behalf of electric utilities and alternative retail electric suppliers.³ According to the Act, “entities installing distributed generation facilities” essentially includes all third-party installers.⁴ On March 21, 2012, the Commission initiated a rulemaking proceeding to implement § 16-128A.⁵

To better inform our understanding of potential certification requirements, we reviewed requirements in six states: California, Colorado, Connecticut, Maryland, New Jersey and New York.

Ultimately, these states’ requirements were varied. However, three of the six states—Colorado, Connecticut and New York—require North America Board of Certified Energy Practitioners (NABCEP) certification to some extent, although New York alternatively allows for IBEW-NECA certification for PV installers. In addition, Maryland is considering requiring NABCEP certification. State requirements also include varying number of years of experience and/or successful solar installations, among other criteria.

¹ Keyes, Fox & Wiedman, LLP, IREC’s counsel, drafted this memorandum for IREC, through funding provided under the U.S. Department of Energy SunShot Initiative. Contact Jason Keyes at 510-314-8203 or jkeyes@keyesandfox.com with any questions.

² Ill. Pub. Utils. Act § 16-128A(a).

³ Ill. Pub. Utils. Act § 16-128(a).

⁴ *Id.* (referring to § 16-102).

⁵ ICC, Order Instituting Rulemaking, Docket No. 12-0213 (March 21, 2012).

California

With limited exceptions, any contractor performing construction work in California that totals \$500 or more in labor and materials must be licensed by the California Contractor State Licensing Board (CSLB).⁶ Licenses may be issued to individuals, partnerships, corporations or joint ventures, but not LLCs, and companies are required to have at least one “qualifying individual.”⁷ For “solar contractors,”⁸ in particular, the CSLB administers a specific solar contractor examination, which the contractor must pass in addition to the Business and Law Examination. The solar contractor license covers active solar water and space heating systems, solar pool heating systems and PV systems.⁹ “To be eligible to take an examination, the qualifying individual must have had, within the last 10 years, at least four (4) full years of experience in the classification for which he or she is applying. The experience must be at no less than a journeyman level, or as a foreman, supervisor, contractor, or owner-builder. A ‘journeyman’ is defined as an experienced worker who is fully qualified (as opposed to a trainee, helper, laborer, assistant, apprentice, etc.) and is able to perform the trade without supervision, or a person who has completed an apprenticeship program. . . . CSLB may grant up to three years of credit toward the four-year requirement for completed education and/or apprenticeship programs.”¹⁰ California allows for limited reciprocity for licenses issued in Arizona, Nevada and Utah.¹¹

⁶ See Cal. Bus. & Professions Code § 7065; CA CSLB, *Blueprint for Becoming a California Licensed Contractor* (2006), available at <http://www.cslb.ca.gov/Resources/GuidesAndPamphlets/BlueprintForGettingLicensed.pdf>; see also CA CSLB Web Page, <http://www.cslb.ca.gov/GeneralInformation/About/BasicFactsAboutCslb.asp>.

⁷ CA CSLB, *Blueprint for Becoming a California Licensed Contractor*, *supra* note 6, at 7.

⁸ “A solar contractor installs, modifies, maintains, and repairs thermal and photovoltaic solar energy systems.” Cal. Code Regs. tit. 16, § 832.45 (describing C-46 solar contractor); see also Cal. Bus. & Professions Code §§ 7058, 7059 (describing specialty contractors, generally).

⁹ For some detail on the exam, see Study Guide for the Solar (C-46) License Examination, available at <http://www.cslb.ca.gov/Resources/StudyGuides/C46StudyGuide.pdf>.

¹⁰ CA CSLB, Application for Additional Classification 2 (rev. June 2011), available at <http://www.cslb.ca.gov/Resources/FormsAndApplications/ApplicationForAdditionalClassification.pdf>.

¹¹ See CA CSLB, *Blueprint for Becoming a California Licensed Contractor*, *supra* note 6, at 8; CA CSLB Reciprocal Classifications List, <http://www.cslb.ca.gov/Applicants/Reciprocity/ReciprocalClassificationsList.asp>.

The California Solar Initiative (CSI), which provides incentives for solar installations, requires that systems be installed by an appropriately licensed California contractor in accordance with the CSLB rules and regulations.¹²

Colorado

As of January 1, 2012, Colorado requires that all solar installations funded “wholly or partially through rate-payer-funded incentives” be “subject to on-site supervision by a certified photovoltaic energy practitioner as designated by the North American Board of Certified Energy Practitioners (NABCEP) or another nationally recognized professional organization designated by the Colorado state electrical board by rule.”¹³ The incentive applicant is responsible for obtaining the necessary information and documentation to ensure compliance with this requirement, though the utility must keep copies of such documents.¹⁴ In addition, “[a]ll work performed on the alternating-current side of the inverter will be performed by an electrical contractor,” and the workers must maintain “[t]he appropriate ratio of no less than one journeyman or residential wireman for every three electrical apprentices”¹⁵ Finally, “during any photovoltaic electrical work, the ratio of the number of persons who are assisting with the work and who are neither licensed electricians nor registered electrical apprentices to the number of persons who are certified as provided in paragraph (a) [i.e., NABCEP-certified] cannot exceed three to one.”¹⁶ In other words, there must be at least one NABCEP-certified worker for every three non-NABCEP-certified workers.

Connecticut

By Connecticut statute, the Connecticut Clean Energy Finance and Investment Authority (CEFIA) must “identify barriers to the development of a permanent Connecticut-based solar workforce and shall make provision for comprehensive training, accreditation and certification programs through institutions and individuals accredited and certified to national standards.”¹⁷ According to the CEFIA web site, approved contractors must have (1) a Connecticut licensed E-1 employee or subcontractor on its application for approval and (2) at least one permanent employee that has successfully completed and passed the NABCEP entry-level PV exam.¹⁸ An “E-1” license is for an “unlimited electrical

¹² See Go Solar California, CSI FAQ, <http://www.gosolarcalifornia.ca.gov/csi/faqs.php>.

¹³ HB 10-1001, CRS 40-2-128(a)(I). It does not appear that the Colorado electrical board has provided for another type of certification.

¹⁴ CRS 40-2-128(a)(II).

¹⁵ CRS 40-2-128(b).

¹⁶ CRS 40-2-128(c)-(d).

¹⁷ Conn. Gen. Stat. § 16-245ff(g).

¹⁸ CT CEFIA, Become an Approved Contractor or Third-Party PV System Owner, <http://www.ctcleanenergy.com/YourHome/ResidentialSolarInvestmentProgram/BecomeApprovedContractor/tabid/92/Default.aspx>; see also CT CEFIA, Request for

contractor,” who is permitted to do all electrical work” as defined by statute.¹⁹ Such approval is necessary for participation in the state’s Residential Solar Photovoltaic Investment Program.

Maryland

Under current Maryland law, in implementing the State’s Solar Energy Grant Program,²⁰ the Maryland Energy Administration (MEA) may not: “(A) Approve grants for photovoltaic systems property equipment and solar water heating property equipment that do not meet national safety or performance standards for the type of equipment described in the standards of a nationally recognized testing laboratory; or (B) Approve projects that are not in compliance with State and local laws and ordinances.”²¹

However, the state is currently considering implementation of additional certification language for contractors. The most recent version of the proposed language states that the MEA may not: “(C) Approve projects by installing contractors who are not registered to do business in Maryland; or (D) Approve projects that are installed on or after July 1, 2014, by installing contractors who do not maintain at least one staff member with a North American Board of Certified Energy Practitioners (“NABCEP”) Installation Certification, or for companies with at least 50 employees, at least one staff member with a NABCEP Installation Certification for every 25 non-administrative employees, except if an installing contractor has been registered to do business in Maryland for less than 12 months prior to the submission of an application for a grant.”²²

New Jersey

New Jersey law states that “electrical contractors,” including solar contractors (individuals, firms, corporations or other legal entities), may not “advertise, enter into, engage in or work in business as an electrical contractor,” without first obtaining the

Qualifications for Approved Contractors and Third-Party PV System Owners (rev. April 3, 2012), *available at* <http://www.ctcleanenergy.com/Portals/0/Apr%202012%20Contractor%20RFQ%20.pdf> (additional information re CT’s requirements).

¹⁹ CT Dept. of Consumer Protection, Electrical License Types and Scope of Work, <http://www.ct.gov/dcp/cwp/view.asp?a=1624&q=461582>. To qualify for an exam for such a license, an applicant must have two years as an unlimited licensed journeyman or at least six years of equivalent experience and training. *Id.*

²⁰ This program “provides grants to individuals, local governments, and businesses located in Maryland for portions of the costs of acquiring and installing photovoltaic property and solar water heating property.” COMAR § 14.26.04.01.

²¹ COMAR § 14.26.04.07.

²² E-mail from Doug Hinrichs, MEA, to Kerinia Cusick, SunEdison.

necessary business permit and license.²³ To obtain a license, an electrical contractor must “establish his qualifications,” “take and pass the examination for electrical contractors,” and have at least five years experience.²⁴ As part of the triennial license renewal required by statute, electrical contractors must complete continuing study, including 24 hours of instruction covering one or more listed subjects. These subjects include both “installation, erection, repair or alteration of electrical equipment for the generation, transmission or utilization of electrical energy” and “transmission or utilization of electrical energy.”²⁵

In addition, the State’s Clean Energy Program requires solar contractors installing equipment at residential or non-commercial building to obtain a “home improvement contractor” (HIC) license, even if the contractor already has an electrical contractor license.²⁶

The NJ Board of Public Utilities (BPU) provides a list of renewable energy system installers and vendors that are “Trade Allies.”²⁷ To be listed on the web site, renewable energy installers must have completed three successful installations, specifically via demonstration of three completed inspections within the State’s Clean Energy Program.²⁸ However, the list is not intended to be exhaustive of all qualified contractors and it is not necessary for a contractor to appear on the list in order to be eligible for New Jersey’s rebate program.

New York

Except for asbestos abatement work, all construction work in New York is regulated at the local level.

However, in order to receive the State’s solar PV incentives through the New York State Energy Research and Development Authority (NYSERDA), installers must qualify via one of two paths: (1) NABCEP certification or (2) IBEW-NECA Electric Journeyman &

²³ NJSA § 45:5A-2(d), -9(a); *see also* NJ BPU, SREC *Registration Program Guidebook* 23 (rev. March 9, 2012), *available at* http://www.njcleanenergy.com/files/file/Emily%20Woods/SRP_Guidebook_2012_0309.pdf

²⁴ NJSA § 45:5A-9(b).

²⁵ NJSA § 45:5A-13.1-13.3.

²⁶ NJSA §§ 56:8-136 – -152; 13 NJR §§ 45A-16.1 – 17.14; NJ CEP, Trade Ally: Sign-Up Disclaimer, <http://www.njcleanenergy.com/residential/tools-and-resources/disclaimer>; *see also* Home Improvement Contractors Web Page, <http://www.njconsumeraffairs.gov/HIC/>.

²⁷ NJ CEP, Find a Trade Ally, <http://www.njcleanenergy.com/findavendor>.

²⁸ NJ CEP, Trade Ally: Sign-Up Disclaimer, <http://www.njcleanenergy.com/residential/tools-and-resources/disclaimer>.

Apprentice Training.²⁹ In addition, installers must show appropriate experience, and provide three written business references for completed, grid-connected PV installations.³⁰ The installer's application for certification will not be processed if the installer is delinquent or has unresolved customer or performance issues with respect to another system associated with a NYSERDA program.³¹

Likewise, solar thermal installers must be Solar Thermal NABCEP certified, "or have nationally accredited Solar Thermal training or Solar Thermal training provided as part of an accredited apprentice training program or its equivalent and demonstration of experience in installing systems."³² Solar thermal installers must demonstrate similar levels of experience, customer references and past successful performance as PV installers.

NYSERDA maintains a list of eligible solar PV and solar thermal installers.³³

²⁹ NYSERDA, PON 2112—Solar PV Program Financial Incentives, Attachment F: Eligible Installer Instructions and Application, *available at* <http://www.nyserda.ny.gov/en/Funding-Opportunities/Current-Funding-Opportunities/PON-2112-Solar-PV-Program-Financial-Incentives.aspx>.

³⁰ *Id.*

³¹ *Id.*

³² NYSERDA, PON 2149—Solar Thermal Incentive Program, Attachment E: Eligible Installer Instructions and Application, *available at* <http://www.nyserda.ny.gov/en/Funding-Opportunities/Current-Funding-Opportunities/PON-2149-Solar-Thermal-Incentive-Program.aspx>.

³³ NYSERDA, Find a Contractor, <http://www.nyserda.ny.gov/Contractors/Find-a-Contractor>.